

MDE**MARYLAND DEPARTMENT OF THE ENVIRONMENT**1800 Washington Boulevard • Baltimore MD 21230
410-537-3000 • 1-800-633-6101Martin O'Malley
GovernorShari T. Wilson
SecretaryAnthony G. Brown
Lieutenant Governor

OCT 14 2008

Robert M. Summers, Ph.D.
Deputy Secretary

RECEIVED

OCT 20 2008

Air Protection Division

Mr. Bob McCleary
W.L. Gore & Associates, Inc.
Cherry Hill Plant
2401 Singerly Road
Elkton, MD 21921

Dear Mr. McCleary:

Enclosed please find your Permit to Construct for the Fabrics Membrane Line with dryer (FDL09) to be located at your facility at 2401 Singerly Road, Elkton MD. The permit contains both general conditions, which apply to all air quality permit holders in Maryland, and specific conditions, which apply to the Fabrics Membrane Line with dryer (FDL09) that you have proposed to install/construct.

The addition of Fabrics Membrane Line with dryer (FDL09) qualifies as an "Off-Permit" change to the facility's Part 70 operating permit. The Department recognizes the permit to construct application as written notification of the proposed change. Please include the Fabrics Membrane Line with dryer (FDL09) in the application for the next renewal of the Part 70 permit.

If you have any questions regarding the issuance of this permit, please contact Marcellina Gurley at (410) 537-3225.

Sincerely,


Karen G. Irons, P.E., Administrator
Air Quality Permits Program
Air & Radiation Management Administration

KGI/aw

Enclosure

cc: Laramie Daniel with copy of permit
Cecil County Health Department
Jay Bozman with copy of permit
EPA Region III

KEEP PERMIT AT SITE

CONTROL NO. B-01981

Martin O' Malley
Governor



Shari T. Wilson
Secretary

DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Management Administration
1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

☒ Construction Permit

☐ Operating Permit

PERMIT NO. 015-0079-6-0285

DATE ISSUED October 14, 2008

PERMIT FEE \$1,200.00 (PAID)

EXPIRATION DATE In accordance with
COMAR 26.11.02.04B

LEGAL OWNER & ADDRESS

W.L. Gore & Associates, Inc.
2401 Singerly Road
Elkton MD 21921
Attn: Mr. Bob McCleary, Engineering

SITE

Cherry Hill Plant
SAME
CECIL County
AI# - 128

SOURCE DESCRIPTION

Installation of one (1) Fabrics Membrane Line with dryer (FDL09) and emissions controlled by the existing oxidizer control system.

This source is subject to the conditions described on the attached pages.

Page 1 of 12

Program Manager

Director, Air and Radiation Management Administration

W.L. GORE & ASSOCIATES, INC.
CHERRY HILL
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 015-0079-6-0285

INDEX

- Part A - General Provisions
 - Part B - Applicable Regulations
 - Part C - Construction Conditions
 - Part D - Record Keeping and Reporting
 - Part E - Temporary Operating Permit Conditions
-

Part A – General Provisions

- (1) The following Air and Radiation Management Administration (ARMA) permit-to-construct applications and supplemental information are incorporated into this permit by reference:
 - (a) Application for Processing or Manufacturing Equipment (Form 5) received June 20, 2008 for FDL09 a FPM process line with dryer.
 - (b) Summary of Demonstrations for Meeting the Ambient Impact Requirement and T-BACT Requirements (Form 5A) received June 20, 2008 for FDL09 a FPM process line with dryer.
 - (c) Emissions Data (Form 5B) received June 20, 2008 for FDL09 a FPM process line with dryer.
 - (d) Supplemental Information [Narrative] received July 11, 2008 via email.

If there are any conflicts between representations in this permit and representations in the applications, the representations in the permit shall govern. Estimates of dimensions, volumes, emissions rates, operating rates, feed rates and hours of operation included in the applications do not constitute enforceable numeric limits beyond the extent necessary for compliance with applicable requirements.

- (2) Upon presentation of credentials, representatives of the Maryland Department of the Environment ("MDE" or the "Department") and the Cecil County Health Department shall at any reasonable time be granted, without delay and without prior notification, access to the Permittee's property and permitted to:
 - (a) inspect any construction authorized by this permit;

W.L. GORE & ASSOCIATES, INC.
CHERRY HILL
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 015-0079-6-0285

- (b) sample, as necessary to determine compliance with requirements of this permit, any materials stored or processed on-site, any waste materials, and any discharge into the environment;
 - (c) inspect any monitoring equipment required by this permit;
 - (d) review and copy any records, including all documents required to be maintained by this permit, relevant to a determination of compliance with requirements of this permit, and
 - (e) obtain any photographic documentation or evidence necessary to determine compliance with the requirements of this permit.
- (3) The Permittee shall notify the Department prior to increasing quantities and/or changing the types of any materials referenced in the application or limited by this permit. If the Department determines that such increases or changes constitute a modification, the Permittee shall obtain a permit-to-construct prior to implementing the modification.
- (4) Nothing in this permit authorizes the violation of any rule or regulation or the creation of nuisance or air pollution.
- (5) If any provision of this permit is declared by proper authority to be invalid, the remaining provisions of the permit shall remain in effect.
- (6) The addition of the FDL09 a FPM process line with dryer qualifies as an "Off Permit" change to the facility's Part 70 Operating Permit. The Department recognizes the permit to construct application as written notification of the proposed change and should be included in the application for the next renewal of the Part 70 permit.

Part B – Applicable Regulations

- (1) This source is subject to all applicable federally enforceable State air pollution control requirements including, but not limited to, the following regulations:
- (a) COMAR 26.11.01.07C - Report of Excess Emissions.
- (1) In the case of any occurrence of excess emissions, expected to last or actually lasting for 1 hour or more, from any installation required by COMAR 26.11.02.13 to obtain a State permit to operate, the owner or operator shall report the onset and shall report the termination of the occurrence to the Department by telephone.

W.L. GORE & ASSOCIATES, INC.
CHERRY HILL
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 015-0079-6-0285

- (2) Telephone reports of excess emissions shall include the following information:
 - (a) The identity of the installation and the person reporting;
 - (b) The nature or characteristics of the emissions (for example, hydrocarbons, fluorides);
 - (c) The time of occurrence of the onset of the excess emissions and the actual or expected duration of the occurrence; and
 - (d) The actual or probable cause of the excess emissions."
- (b) COMAR 26.11.02.09A – Sources Subject to Permits to Construct and Approval. "A person may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits to construct and approvals: (6) All sources, including installations and air pollution control equipment, except as listed in Regulation .10 of this chapter--permit to construct required.
- (c) COMAR 26.11.06.02C(1) – Visible Emission Standards. "In Areas I, II, V, and VI a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity."
COMAR 26.11.06.02A(2) – Exception. The visible emission standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."
- (d) COMAR 26.11.06.03B(1)(a) – Particulate Matter. "Installations Constructed On or After January 17, 1972. A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/SCFD (115 kg/dscm)."
- (e) COMAR 26.11.19.02B - Method of Compliance.
 - "(1) Unless otherwise stated, compliance with the applicable emission standards established in this chapter is based on the VOC content of each coating or adhesive, as applied.
 - (2) A person subject to this chapter shall comply with the emission standards in this chapter by:
 - (a) Applying low VOC coatings or adhesives that meet applicable standards;

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CHERRY HILL
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 015-0079-6-0285

- (b) Using a control device that, when tested by approved test methods:
 - (i) Complies with applicable emission reduction requirements, or
 - (ii) Results in an emission reduction equal to or greater than the emission reduction that would have been achieved by complying with §B(2)(a) of this regulation;
- (c) Complying with the operating conditions or equipment specifications established in the applicable regulation;
- (d) For sources subject to VOC limits in coatings or inks or other similar products, reducing emissions by using water-based coatings, resins, inks, or similar products that contain less than 25 percent VOC by volume of the volatile portion of the product; or
- (e) Using an alternative method of assessing compliance if:
 - (i) The alternative method is approved by the Department,
 - (ii) The resulting emissions are equal to or less than the emissions that would have been discharged by complying with emission standards,
 - (iii) Adequate records are maintained to ensure enforceability, and
 - (iv) The alternative compliance method is approved by the U.S. EPA as a revision to the State Implementation Plan."
- (f) COMAR 26.11.19.02I - Good Operating Practices, Equipment Cleanup, and VOC Storage.
 - (2)(a) A person who is subject to this section shall implement good operating practices to minimize VOC emissions into the atmosphere.
 - (b) Good operating practices shall, at a minimum, include the following:
 - (i) Provisions for training of operators on practices, procedures, and maintenance requirements that are consistent with the equipment manufacturers' recommendations and the source's experience in operating the equipment, with the training to include proper procedures for maintenance of air pollution control equipment;

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CHERRY HILL
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 015-0079-6-0285

- (ii) Maintenance of covers on containers and other vessels that contain VOC and VOC-containing materials when not in use;
 - (iii) As practical, scheduling of operations to minimize color or material changes when applying VOC coatings or other materials by spray gun;
 - (iv) For spray gun applications of coatings, use of high volume low pressure (HVLP) or other high efficiency application methods where practical; and
 - (v) As practical, mixing or blending materials containing VOC in closed containers and taking preventive measures to minimize emissions for products that contain VOC.
- (c) A person subject to this regulation shall:
- (i) Establish good operating practices in writing;
 - (ii) Make the written operating practices available to the Department upon request; and
 - (iii) Display the good operating practices so that they are clearly visible to the operator or include them in operator training.
- (3) Equipment Cleanup.
- (a) A person subject to this section shall take all reasonable precautions to prevent or minimize the discharge of VOC into the atmosphere when cleaning process and coating application equipment, including containers, vessels, tanks, lines, and pumps.
 - (b) Reasonable precautions for equipment cleanup shall, at a minimum, include the following:
 - (i) Storing all wastes and waste materials, including cloth and paper that are contaminated with VOC, in closed containers;
 - (ii) Preparing written standard operating procedures for frequently cleaned equipment, including when practical, provisions for the use of low-VOC or non-VOC materials and procedures to minimize the quantity of VOC materials used;
 - (iii) Using enclosed spray gun cleaning, VOC-recycling systems and other spray gun cleaning methods where practical that reduce or eliminate VOC emissions; and
 - (iv) Using, when practical, detergents, high-pressure water, or other non-VOC cleaning options to clean coating lines, containers, and process equipment.

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CHERRY HILL
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 015-0079-6-0285

- (4) VOC Storage and Transfer.
- (a) A person subject to this section who stores VOCs shall, at a minimum, install conservation vents or other vapor control measures on storage tanks with a capacity of 2,000 gallons or more, to minimize VOC emissions.
 - (b) A person subject to this section shall, at a minimum, utilize vapor balance, vapor control lines, or other vapor control measures when VOCs are transferred from a tank truck into a stationary storage tank with a capacity greater than 10,000 gallons and less than 40,000 gallons that store VOCs or materials containing VOCs, other than gasoline, that have a vapor pressure greater than 1.5 psia.
- (g) COMAR 26.11.19.16 – Control of VOC Equipment Leaks.
- C. General Requirements.** “A person subject to this regulation shall comply with all of the following requirements:
- (1) Visually inspect all components on the premises for leaks at least once each calendar month.
 - (2) Tag any leak immediately so that the tag is clearly visible. The tag shall be made of a material that will withstand any weather or corrosive conditions to which it may be normally exposed. The tag shall bear an identification number, the date the leak was discovered, and the name of the person who discovered the leak. The tag shall remain in place until the leak has been repaired.
 - (3) Take immediate action to repair all observed VOC leaks that can be repaired within 48 hours.
 - (4) Repair all other leaking components not later than 15 days after the leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak shall be repaired within 48 hours after receiving the part.
 - (5) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced, such as seals, gaskets, packing, and pipefittings.
 - (6) Maintain a log that includes the name of the person conducting the inspection and the date on which leak inspections are made, the findings of the inspection, and a list of leaks by tag identification number. The log shall be made available to the Department upon request. Leak records shall be maintained for a period of not less than 2 years from the date of their occurrence.

W.L. GORE & ASSOCIATES, INC.
CHERRY HILL
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 015-0079-6-0285

D. Exceptions. Components that cannot be repaired as required in this regulation because they are inaccessible, or that cannot be repaired during operation of the source, shall be identified in the log and included within the source's maintenance schedule for repair during the next source shutdown."

- (h) COMAR 26.11.19.30E - General Requirements for FPM Process Installations.
"(1) A person who owns or operates an FPM process installation that has actual uncontrolled VOC emissions of 50 pounds or more per day shall vent the emissions into a thermal oxidizer system or other control method approved by the Department to destroy or reduce VOC emissions by 85 percent or more, overall.
(2) If a thermal oxidizer is installed, the oxidizer combustion chamber shall be:
(a) Operated at a minimum combustion chamber temperature of 1400°F or other temperature approved by the Department that is demonstrated to achieve compliance with this regulation;
(b) Equipped with a continuous temperature monitor to record the oxidizer temperature; and
(c) Equipped with an alarm system that alerts the operator when the oxidizer combustion chamber temperature is less than the approved temperature; and
(d) Equipped with an interlock system that prevents operation of the FPM installation unless the approved control system is operating.
(3) If a source uses an alternative control method approved by the Department, the alternative control method shall be monitored as required by the Department.
(4) Equipment that is installed for the purpose of treating emissions or monitoring shall be operated, maintained, and as applicable, calibrated in accordance with the equipment vendor's specifications.
(5) A person who owns or operates an FPM compounding and tape or shape-forming installation shall minimize fugitive emissions of VOC by:
(a) Immediately enclosing all wet FPM during storage; and
(b) Covering dipping troughs when not in operation.
(6) A person who owns or operates an FPM coating installation that has actual uncontrolled VOC emissions of 20 pounds or more per day may not use a coating that has a VOC content exceeding 2.9 pounds per gallon unless the installation is equipped with a control device that meets the requirements in §E(2), (3), and (4) of this regulation."
- (i) COMAR 26.11.19.30F - Demonstration of Compliance. "Compliance with this regulation shall be demonstrated using the applicable VOC test methods specified in COMAR 26.11.01.04C or other test method approved by the Department."

W.L. GORE & ASSOCIATES, INC.
CHERRY HILL
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 015-0079-6-0285

- (2) This source is subject to all applicable State-only enforceable air pollution control requirements including, but not limited to, the following regulations:
- (a) COMAR 26.11.02.13A – Sources Subject to State Permit to Operate.
“Except for a source that is covered by a Part 70 permit, a person may not operate or cause to be operated any of the following sources without first obtaining, and having in current effect, a State permit to operate as required by this regulation: (28) Coating, decorating, and impregnating lines with integral drying ovens at which coatings or adhesives containing VOC are applied by automatic equipment to surfaces”.
- (b) COMAR 26.11.02.14D – Procedures for Obtaining State Permits to Operate and Permits to Construct Certain Sources and Permit to Construct Control Equipment on Existing Sources. “An application for a permit to construct may be submitted at any time. A complete application for an initial State permit to operate shall be submitted not later than 60 days before the source is to commence operating. A complete application for the renewal of a State Permit to Operate not later than 60 days before the expiration date of the permit. If a timely application for a renewal has been submitted, the current State Permit to Operate remains in effect until the Department makes a final decision to issue or deny the permit.”
- (c) COMAR 26.11.02.19C - Information Required to be Maintained by a Source.
(1) “The owner or operator of a source for which a permit to operate is required shall maintain records necessary to support the emission certification, including the following information:
- (a) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;
 - (b) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;
 - (c) Amounts, types, and analyses of all fuels used;
 - (d) Emission data from continuous emission monitors that are required by this subtitle or EPA regulations, including monitor calibration and malfunction information;
 - (e) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment, including significant maintenance performed, malfunctions and downtime, and episodes of reduced efficiency of this equipment;
 - (f) Limitations on source operation or any work practice standards that significantly affect emissions; and

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CHERRY HILL
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 015-0079-6-0285

- (g) Other relevant information as required by the Department.
 - (2) The logs and other records of information required by §C(1) of this regulation shall be retained for a period of 5 years and made available to the Department upon request.
 - (3) If the owner or operator of a source for which a permit to operate is required fails to maintain or provide the data required by this section, which the Department requests in order to verify the emissions during the previous calendar year, the annual emission-based fee for that source shall be based on the estimated allowable emissions, as defined in COMAR 26.11.01.01B(4), of that source, as determined by the Department."
- (d) COMAR 26.11.02.19D. - Emission Certification.
- (1) "The responsible official designated by the owner or operator of a source for which a permit to operate is required shall certify, as provided at Regulation .02F of this chapter, the actual emissions of regulated air pollutants from all installations at the plant or facility.
 - (2) Certification shall be on a form obtained from the Department and shall be submitted to the Department not later than April 1 of the year following the year for which certification is required.
 - (3) An emission certification submitted pursuant to this section and which contains all information required by COMAR 26.11.01.05-1, for NO_x and VOC, satisfies the requirements of COMAR 26.11.01.05-1."
- (e) COMAR 26.11.06.08 – Nuisance. "An installation or premises may not be operated or maintained in such a manner that nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."
- (f) COMAR 26.11.06.09 – Odors. "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created."
- (g) COMAR 26.11.15.05A – Control Technology Requirement. "A person may not construct, reconstruct, operate, or cause to be constructed, reconstructed, or operated any new installation or new source that will discharge a toxic air pollutant to the atmosphere without installing and operating T-BACT."

W.L. GORE & ASSOCIATES, INC.
CHERRY HILL
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 015-0079-6-0285

(h) COMAR 26.11.15.06A – Ambient Impact Requirement.

- (1) "Except as provided in Sec. A(2), of this regulation, a person may not construct, modify, or operate or cause to be constructed, modified, or operated any new installation or source without first demonstrating to the satisfaction of the Department using procedures established in this chapter that total allowable emissions from the premises of each toxic air pollutant discharged by the new installation or source will not unreasonably endanger human health; and
- (2) If a new installation or source will discharge a TAP that is not listed in COMAR 26.11.16.07, and will be part of an existing premises, then emissions of that TAP from existing sources or existing installations on the premises may be omitted from a screening analysis unless the TAP is added to COMAR 26.11.16.07."

Part C – Construction Conditions

- (1) The FDL09 a FPM process line with dryer shall be constructed in accordance with specifications included in the applications.
- (2) Emissions from the dryer shall be controlled by the existing oxidizer control system.

Part D – Record Keeping and Reporting

- (1) The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information:
 - (a) Monthly record of material usage and hours of operation of the FDL09 a FPM process line.
 - (b) All written descriptions of "good operating practices" designed to minimize emissions of VOC.
 - (c) VOC leak detection and repair logs that include identification of the persons who conducted the leak detection inspections, the dates on which the inspections were conducted, the findings during the inspections, a listing by tag identification number and a description of all leaks discovered, and the date and nature of all leak repairs effected.

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CHERRY HILL
PERMIT-TO-CONSTRUCT CONDITIONS
PERMIT No. 015-0079-6-0285

- (2) The Permittee shall report, in accordance with requirements under COMAR 26.11.01.07C, occurrences of excess emissions to the Compliance Program of the Air and Radiation Management Administration.

PART E - TEMPORARY OPERATING PERMIT CONDITIONS

- (1) This permit allows the Permittee to operate the FDL09 a FPM process line with dryer for a start-up period of 180 days after the initial start-up. This period shall be used to demonstrate compliance with applicable air quality regulations and permit to construct conditions. If the Permittee is unable to complete the compliance demonstration during this period, the Permittee shall submit to the Department a written request for extension to the start-up period at least 30 days before the end of the period.
- (2) The Permittee shall operate the FDL09 a FPM process line with dryer in accordance with the permit to construct conditions and operating procedures as provided by the equipment vendor.
- (3) Operating in accordance with terms and conditions expressed in Conditions (1) and (2) above does not authorize the Permittee to violate any rule or regulation nor create a nuisance or air pollution.
- (4) The Permittee shall notify the Department in writing of the anticipated date of initial start-up of the fabric membrane line not less than 30 days prior to such date.
- (5) The Permittee shall notify the Department in writing of the actual date of start-up of the fabric membrane line no later than 15 days after the initial start-up.

